

10. A landing bearing according to claim 9, wherein the rolling elements are spherical balls.

11. A landing bearing according to claim 9, wherein the steel rolling elements are made of stainless steel.

12. A landing bearing according to claim 9, wherein the ceramic rolling elements are made of silicon nitride.

13. A landing bearing according to claim 9, wherein the running tracks are made of stainless steel.

14. A vacuum pump including at least one landing mechanical bearing comprising a landing bearing according to claim 1.

15. A vacuum pump according to claim 14, comprising a rotor mounted to rotate in a stator with at least one radial magnetic bearing which, in normal operation, holds the rotor in a radially centered position inside the stator, and with at least one mechanical landing bearing comprising a landing bearing which, in the event of normal operation of the radial magnetic bearings failing, limits radial displacements of the rotor within the stator by ensuring that the rotor remains approximately centered, radial clearance being provided between one of the rotor ring or stator ring and the corresponding bearing surface of the rotor or of the stator.